**Algebra II Name:**

**1.7 Reading Graphs Date:**

**READING GRAPHS OF FUNCTIONS**

1. Use the graph **below** to answer the following:

A. Find . E. Is  positive or negative?

B. Find . F. For what values of *x* is?

C. Find . G. For what values of *x* is *f*(*x*) = 2?

D. Is  positive or negative?



2. Use the graph **below** to answer the following:

A. What is ? E. What is *f*(2)?

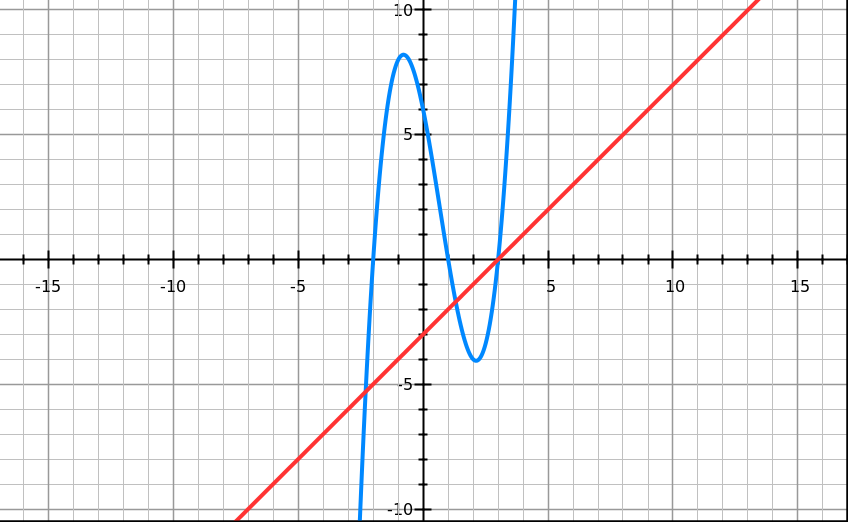
B. Find *x* so that . F. Is *f*(-4) positive or negative?

C. Find where = 0. G. For what *x* values is *f*(*x*) = -8

D. What what values of *x* does *f*(x) = 2.5? H. For what value, if any, is ?



3. Use the graphs of f(x) and g(x) to answer the questions below.



1. Which is greater, f(2) or g(2)?
2. Which is greater, f(-2) or g(3)?
3. Which is greater, the x value for g(x) = -5 or the x value for f(x) = 5?
4. True of False? g(4) > f(4)
5. True or False? g(3) > f(3)
6. What is f(0) + g(5) = ?
7. On what intervals is f(x) > g(x)?

4. When a medicinal drug is injected into a person’s muscle tissue, the concentration of the drug in the blood is a function of the time elapsed since the injection. Use the graph below to answer the following:

( corresponds to the time of injection)

A. What is the concentration of the drug one hour after the injection?

B. Find and give an interpretation.

C. Over what interval is the concentration greater than 0.01?



5. The graph below illustrates the temperature on a particular day as a function of time since midnight.

A. What was the temperature at 3:00 a.m.?

B. When was the temperature 5 degrees?

C. When was the temperature below freezing? (less than 0 degrees)

D. When was the temperature increasing?

